SEQUENCE LISTING

(1) GENERAL INFORMATION:

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(ii) TITLE OF INVENTION: CHEMOKINE β-6 ANTAGONISTS

(iii) NUMBER OF SEQUENCES: 114

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(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: To be assigned
(B) FILING DATE: Herewith
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: 60/042,269
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(C) REFERENCE/DOCKET NUMBER: 1488.0340004

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(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 360 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(ix) FEATURE:
(A) NAME/KEY: CDS
(B) LOCATION: 1..357

(ix) FEATURE:

(A) NAME/KEY: sig_peptide
(B) LOCATION: 1..79

(ix) FEATURE:
(A) NAME/KEY: mat_peptide
(B) LOCATION: 79..357

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```
ATG GCA GGC CTG ATG ACC ATA GTA ACC AGC CTT CTG TTC CTT GGT GTC          48
Met Ala Gly Leu Met Thr Ile Val Thr Ser Leu Leu Phe Leu Gly Val
-26 -25                 -20                 -15

TGT GCC CAC CAC ATC ATC CCT ACG GGC TCT GTG GTC ATA CCC TCT CCC          96
Cys Ala His His Ile Ile Pro Thr Gly Ser Val Val Ile Pro Ser Pro
-10                  -5                   1                   5

TGC TGC ATG TTC TTT GTT TCC AAG AGA ATT CCT GAG AAC CGA GTG GTC         144
Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn Arg Val Val
             10                  15                  20

AGC TAC CAG CTG TCC AGC AGG AGC ACA TGC CTC AAG GCA GGA GTG ATC         192
Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala Gly Val Ile
         25                  30                  35

TTC ACC ACC AAG AAG GGC CAG CAG TTC TGT GGC GAC CCC AAG CAG GAG         240
Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro Lys Gln Glu
     40                  45                  50

TGG GTC CAG AGG TAC ATG AAG AAC CTG GAC GCC AAG CAG AAG AAG GCT         288
Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln Lys Lys Ala
 55                  60                  65                  70

TCC CCT AGG GCC AGG GCA GTG GCT GTC AAG GGC CCT GTC CAG AGA TAT         336
Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val Gln Arg Tyr
                 75                  80                  85

CCT GGC AAC CAA ACC ACC TGC TAA                                        360
Pro Gly Asn Gln Thr Thr Cys
             90
```

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 119 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

```
Met Ala Gly Leu Met Thr Ile Val Thr Ser Leu Leu Phe Leu Gly Val
-26 -25                 -20                 -15

Cys Ala His His Ile Ile Pro Thr Gly Ser Val Val Ile Pro Ser Pro
-10                  -5                   1                   5
```

```
Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn Arg Val Val
             10                  15                  20

Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala Gly Val Ile
         25                  30                  35

Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro Lys Gln Glu
     40                  45                  50

Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln Lys Lys Ala
 55                  60                  65                  70

Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val Gln Arg Tyr
                 75                  80                  85

Pro Gly Asn Gln Thr Thr Cys
             90
```

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 26 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

TCAGGATCCC CTACGGGCTC GTGGTC 26

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 26 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

TGACCGGCAG CAAAATGAGA TCTCGC 26

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 99 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Met Lys Val Ser Ala Ala Leu Leu Cys Leu Leu Leu Ile Ala Ala Thr
1 5 10 15

Phe Ile Pro Gln Gly Leu Ala Gln Pro Asp Ala Ile Asn Ala Pro Val
20 25 30

Thr Cys Cys Tyr Asn Phe Thr Asn Arg Lys Ile Ser Val Gln Arg Leu
35 40 45

Ala Ser Tyr Arg Arg Ile Thr Ser Ser Lys Cys Pro Lys Glu Ala Val
50 55 60

Ile Phe Lys Thr Ile Val Ala Lys Glu Ile Cys Ala Asp Pro Lys Gln
65 70 75 80

Lys Trp Val Gln Asp Ser Met Asp His Leu Asp Lys Gln Thr Gln Thr
85 90 95

Pro Lys Thr

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

ATGGTGGTTA TACCTTCTCC GTGCTGCATG TTCTTTGTTA GCAAGCGCAT TCCTGAAAAC 60

CGTGTGGTCA GCTACCAGCT GTCCAGCCGC AGCACCTGCC TGAAAGCTGG CGTGATCTTC 120

ACCACCAAAA AGGGCCAGCA GTTCTGTGGC GACCCGAAAC AAGAGTGGGT CCAGCGTTAC 180

ATGAAAAACC TGGACGCCAA ACAGAAGAAA GCTTCCCCTC GTGCCCGCGC AGTGGCTGTC 240

AAAGGCCCTG TTCAGCGTTA TCCGGGCAAC CAAACCACCT GCTAA 285

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 96 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GACTCCATGG TGGTTATACC TTCTCCGTGC TGCATGTTCT TTGTTAGCAA GCGCATTCCT 60

GAAAACCGTG TGGTCAGCTA CCAGCTGTCC AGCCGC 96

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 97 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GTTTCGGGTC GCCACAGAAC TGCTGGCCCT TTTTGGTGGT GAAGATCACG CCAGCTTTCA 60

GGCAGGTGCT GCGGCTGGAC AGCTGGTAGC TGACCAC 97

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 98 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

AAGGGCCAGC AGTTCTGTGG CGACCCGAAA CAAGAGTGGG TCCAGCGTTA CATGAAAAAC 60

CTGGACGCCA AACAGAAGAA AGCTTCCCCT CGTGCCCG 98

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 99 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

AGTCAGATCT TTAGCAGGTG GTTTGGTTGC CCGGATAACG CTGAACAGGG CCTTTGACAG 60

CCACTGCGCG GGCACGAGGG GAAGCTTTCT TCTGTTTGG 99

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 34 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GACGGATCCC CATATGGTGG TTATACCTTC TCCG 34

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 32 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GACTGGTACC TTAGCAGGTG GTTTGGTTGC CC 32

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 36 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

GACTGGTACC TTATCAACGA GGGGAAGCTT TCTTCT 36

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 37 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GACTGGTACC CTATCAAGCC ACTGCGCGGG CACGAGG 37

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 34 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GACTCATATG GTTATACCTT CTCCGTGCTG CATG 34

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 31 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GACTCATATG ATACCTTCTC CGTGCTGCAT G 31

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 31 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GACTCATATG CCTTCTCCGT GCTGCATGTT C 31

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 32 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

GACTCATATG TCTCCGTGCT GCATGTTCTT TG 32

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 29 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GACTCATATG CCGTGCTGCA TGTTCTTTG 29

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 30 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GACTCATATG TGCTGCATGT TCTTTGTTAG 30

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 4256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

AAGCTTAAAA AACTGCAAAA AATAGTTTGA CTTGTGAGCG GATAACAATT AAGATGTACC 60

CAATTGTGAG CGGATAACAA TTTCACACAT TAAAGAGGAG AAATTACATA TGGTGGTTAT 120

ACCTTCTCCG TGCTGCATGT TCTTTGTTAG CAAGCGCATT CCTGAAAACC GTGTGGTCAG 180

CTACCAGCTG TCCAGCCGCA GCACCTGCCT GAAAGCTGGC GTGATCTTCA CCACCAAAAA 240

GGGCCAGCAG TTCTGTGGCG ACCCGAAACA AGAGTGGGTC CAGCGTTACA TGAAAAACCT 300

GGACGCCAAA CAGAAGAAAG CTTCCCCTCG TGCCCGCGCA GTGGCTGTCA AAGGCCCTGT 360

TCAGCGTTAT CCGGGCAACC AAACCACCTG CTAAGGTACC TAAGTGAGTA GGGCGTCCGA 420

TCGACGGACG CCTTTTTTTT GAATTCGTAA TCATGGTCAT AGCTGTTTCC TGTGTGAAAT 480

TGTTATCCGC TCACAATTCC ACACAACATA CGAGCCGGAA GCATAAAGTG TAAAGCCTGG 540

GGTGCCTAAT GAGTGAGCTA ACTCACATTA ATTGCGTTGC GCTCACTGCC CGCTTTCCAG 600

TCGGGAAACC TGTCGTGCCA GCTGCATTAA TGAATCGGCC AACGCGCGGG GAGAGGCGGT 660

TTGCGTATTG GGCGCTCTTC CGCTTCCTCG CTCACTGACT CGCTGCGCTC GGTCGTTCGG 720

CTGCGGCGAG CGGTATCAGC TCACTCAAAG GCGGTAATAC GGTTATCCAC AGAATCAGGG 780

GATAACGCAG GAAAGAACAT GTGAGCAAAA GGCCAGCAAA AGGCCAGGAA CCGTAAAAAG 840

GCCGCGTTGC TGGCGTTTTT CCATAGGCTC CGCCCCCCTG ACGAGCATCA CAAAAATCGA 900

CGCTCAAGTC AGAGGTGGCG AAACCCGACA GGACTATAAA GATACCAGGC GTTTCCCCCT 960

GGAAGCTCCC TCGTGCGCTC TCCTGTTCCG ACCCTGCCGC TTACCGGATA CCTGTCCGCC 1020

TTTCTCCCTT CGGGAAGCGT GGCGCTTTCT CATAGCTCAC GCTGTAGGTA TCTCAGTTCG 1080

GTGTAGGTCG TTCGCTCCAA GCTGGGCTGT GTGCACGAAC CCCCCGTTCA GCCCGACCGC 1140

TGCGCCTTAT CCGGTAACTA TCGTCTTGAG TCCAACCCGG TAAGACACGA CTTATCGCCA 1200

CTGGCAGCAG CCACTGGTAA CAGGATTAGC AGAGCGAGGT ATGTAGGCGG TGCTACAGAG 1260

TTCTTGAAGT GGTGGCCTAA CTACGGCTAC ACTAGAAGAA CAGTATTTGG TATCTGCGCT 1320

CTGCTGAAGC CAGTTACCTT CGGAAAAAGA GTTGGTAGCT CTTGATCCGG CAAACAAACC 1380

ACCGCTGGTA GCGGTGGTTT TTTTGTTTGC AAGCAGCAGA TTACGCGCAG AAAAAAAGGA 1440

TCTCAAGAAG ATCCTTTGAT CTTTTCTACG GGGTCTGACG CTCAGTGGAA CGAAAACTCA 1500

CGTTAAGGGA TTTTGGTCAT GAGATTATCG TCGACAATTC GCGCGCGAAG GCGAAGCGGC 1560

ATGCATTTAC GTTGACACCA TCGAATGGTG CAAAACCTTT CGCGGTATGG CATGATAGCG 1620

CCCGGAAGAG AGTCAATTCA GGGTGGTGAA TGTGAAACCA GTAACGTTAT ACGATGTCGC 1680

AGAGTATGCC GGTGTCTCTT ATCAGACCGT TTCCCGCGTG GTGAACCAGG CCAGCCACGT 1740

TTCTGCGAAA ACGCGGGAAA AAGTGGAAGC GGCGATGGCG GAGCTGAATT ACATTCCCAA 1800

CCGCGTGGCA CAACAACTGG CGGGCAAACA GTCGTTGCTG ATTGGCGTTG CCACCTCCAG 1860

TCTGGCCCTG CACGCGCCGT CGCAAATTGT CGCGGCGATT AAATCTCGCG CCGATCAACT 1920

GGGTGCCAGC GTGGTGGTGT CGATGGTAGA ACGAAGCGGC GTCGAAGCCT GTAAAGCGGC 1980

GGTGCACAAT CTTCTCGCGC AACGCGTCAG TGGGCTGATC ATTAACTATC CGCTGGATGA 2040

CCAGGATGCC ATTGCTGTGG AAGCTGCCTG CACTAATGTT CCGGCGTTAT TTCTTGATGT 2100

CTCTGACCAG ACACCCATCA ACAGTATTAT TTTCTCCCAT GAAGACGGTA CGCGACTGGG 2160

CGTGGAGCAT CTGGTCGCAT TGGGTCACCA GCAAATCGCG CTGTTAGCGG GCCCATTAAG 2220

TTCTGTCTCG GCGCGTCTGC GTCTGGCTGG CTGGCATAAA TATCTCACTC GCAATCAAAT 2280

TCAGCCGATA GCGGAACGGG AAGGCGACTG GAGTGCCATG TCCGGTTTTC AACAAACCAT 2340

GCAAATGCTG AATGAGGGCA TCGTTCCCAC TGCGATGCTG GTTGCCAACG ATCAGATGGC 2400

GCTGGGCGCA ATGCGCGCCA TTACCGAGTC CGGGCTGCGC GTTGGTGCGG ATATCTCGGT 2460

AGTGGGATAC GACGATACCG AAGACAGCTC ATGTTATATC CCGCCGTTAA CCACCATCAA 2520

ACAGGATTTT CGCCTGCTGG GGCAAACCAG CGTGGACCGC TTGCTGCAAC TCTCTCAGGG 2580

CCAGGCGGTG AAGGGCAATC AGCTGTTGCC CGTCTCACTG GTGAAAAGAA AAACCACCCT 2640

GGCGCCCAAT ACGCAAACCG CCTCTCCCCG CGCGTTGGCC GATTCATTAA TGCAGCTGGC 2700

ACGACAGGTT TCCCGACTGG AAAGCGGGCA GTGAGCGCAA CGCAATTAAT GTAAGTTAGC 2760

GCGAATTGTC GACCAAAGCG GCCATCGTGC CTCCCCACTC CTGCAGTTCG GGGGCATGGA 2820

TGCGCGGATA GCCGCTGCTG GTTTCCTGGA TGCCGACGGA TTTGCACTGC CGGTAGAACT 2880

CCGCGAGGTC GTCCAGCCTC AGGCAGCAGC TGAACCAACT CGCGAGGGGA TCGAGCCCGG 2940

GGTGGGCGAA GAACTCCAGC ATGAGATCCC CGCGCTGGAG GATCATCCAG CCGGCGTCCC 3000

GGAAAACGAT TCCGAAGCCC AACCTTTCAT AGAAGGCGGC GGTGGAATCG AAATCTCGTG 3060

ATGGCAGGTT GGGCGTCGCT TGGTCGGTCA TTTCGAACCC CAGAGTCCCG CTCAGAAGAA 3120

CTCGTCAAGA AGGCGATAGA AGGCGATGCG CTGCGAATCG GGAGCGGCGA TACCGTAAAG 3180

CACGAGGAAG CGGTCAGCCC ATTCGCCGCC AAGCTCTTCA GCAATATCAC GGGTAGCCAA 3240

CGCTATGTCC TGATAGCGGT CCGCCACACC CAGCCGGCCA CAGTCGATGA ATCCAGAAAA 3300

GCGGCCATTT TCCACCATGA TATTCGGCAA GCAGGCATCG CCATGGGTCA CGACGAGATC 3360

CTCGCCGTCG GGCATGCGCG CCTTGAGCCT GGCGAACAGT TCGGCTGGCG CGAGCCCCTG 3420

ATGCTCTTCG TCCAGATCAT CCTGATCGAC AAGACCGGCT TCCATCCGAG TACGTGCTCG 3480

CTCGATGCGA TGTTTCGCTT GGTGGTCGAA TGGGCAGGTA GCCGGATCAA GCGTATGCAG 3540

CCGCCGCATT GCATCAGCCA TGATGGATAC TTTCTCGGCA GGAGCAAGGT GAGATGACAG 3600

GAGATCCTGC CCCGGCACTT CGCCCAATAG CAGCCAGTCC CTTCCCGCTT CAGTGACAAC 3660

GTCGAGCACA GCTGCGCAAG GAACGCCCGT CGTGGCCAGC CACGATAGCC GCGCTGCCTC 3720

GTCCTGCAGT TCATTCAGGG CACCGGACAG GTCGGTCTTG ACAAAAAGAA CCGGGCGCCC 3780

CTGCGCTGAC AGCCGGAACA CGGCGGCATC AGAGCAGCCG ATTGTCTGTT GTGCCCAGTC 3840

ATAGCCGAAT AGCCTCTCCA CCCAAGCGGC CGGAGAACCT GCGTGCAATC CATCTTGTTC 3900

AATCATGCGA AACGATCCTC ATCCTGTCTC TTGATCAGAT CTTGATCCCC TGCGCCATCA 3960

GATCCTTGGC GGCAAGAAAG CCATCCAGTT TACTTTGCAG GGCTTCCCAA CCTTACCAGA 4020

GGGCGCCCCA GCTGGCAATT CCGGTTCGCT TGCTGTCCAT AAAACCGCCC AGTCTAGCTA 4080

TCGCCATGTA AGCCCACTGC AAGCTACCTG CTTTCTCTTT GCGCTTGCGT TTTCCCTTGT 4140

CCAGATAGCC CAGTAGCTGA CATTCATCCG GGGTCAGCAC CGTTTCTGCG GACTGGCTTT 4200

CTACGTGTTC CGCTTCCTTT AGCAGCCCTT GCGCCCTGAG TGCTTGCGGC AGCGTG 4256

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 112 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

AAGCTTAAAA AACTGCAAAA AATAGTTTGA CTTGTGAGCG GATAACAATT AAGATGTACC 60

CAATTGTGAG CGGATAACAA TTTCACACAT TAAAGAGGAG AAATTACATA TG 112

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 45 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys
35 40 45

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 46 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly
        35                  40                  45
```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 47 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45
```

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 48 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30
```

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 49 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln
50

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 51 amino acids
(B) TYPE: amino acid

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu
50

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp
50

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 53 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                   10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val
    50
```

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                   10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln
    50
```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                   10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45
```

Lys Gln Glu Trp Val Gln Arg
50 55

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr
50 55

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met
50 55

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 58 amino acids
(B) TYPE: amino acid

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys
    50                  55
```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn
    50                  55
```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu
    50                  55                  60
```

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 61 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp
    50                  55                  60
```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 62 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala
```

50 55 60

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 63 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 64 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 65 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys
65
```

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 66 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys
65
```

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 67 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala
65

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 68 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser
65

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 69 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro
65
```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 70 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg
65                  70
```

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 71 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30
```

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser Pro Arg Ala
65 70

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 72 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser Pro Arg Ala Arg
65 70

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser Pro Arg Ala Arg Ala
65 70

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 74 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val
65 70

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 75 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala
65 70 75

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 76 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val
65                  70                  75
```

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 77 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys
65                  70                  75
```

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly
65                  70                  75
```

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 79 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65                  70                  75
```

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 80 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80
```

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 81 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln
```

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 82 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln Arg
```

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 83 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln Arg Tyr
```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 84 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln Arg Tyr Pro
```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 85 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln Arg Tyr Pro Gly
                85
```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 86 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln Arg Tyr Pro Gly Asn
                85
```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 87 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln Arg Tyr Pro Gly Asn Gln
                85
```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 88 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65 70 75 80

Gln Arg Tyr Pro Gly Asn Gln Thr
85

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 89 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1 5 10 15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
20 25 30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
35 40 45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
50 55 60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65 70 75 80

Gln Arg Tyr Pro Gly Asn Gln Thr Thr
85

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 90 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu Asn
1               5                  10                  15

Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys Ala
            20                  25                  30

Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp Pro
        35                  40                  45

Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys Gln
    50                  55                  60

Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro Val
65                  70                  75                  80

Gln Arg Tyr Pro Gly Asn Gln Thr Thr Cys
                85                  90
```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 46 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys
        35                  40                  45
```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 47 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
```

20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly
35 40 45

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 48 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 49 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys
    50
```

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 51 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln
    50
```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15
```

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu
50

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 53 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp
50

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val
50

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln
    50                  55
```

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg
    50                  55
```

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr
50 55

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 58 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met
50 55

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys
50 55

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn
50 55 60

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 61 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu
50 55 60

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 62 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp
    50                  55                  60
```

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 63 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala
    50                  55                  60
```

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 64 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15
```

```
Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60
```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 65 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                   10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln
65
```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 66 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                   10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45
```

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys
65

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 67 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys
65

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 68 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala
65

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 69 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser
65
```

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 70 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro
65                  70
```

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 71 amino acids

(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro Arg
65                  70
```

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 72 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro Arg Ala
65                  70
```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg
65 70

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 74 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala
65 70

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 75 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val
65                  70                  75
```

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 76 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala
65                  70                  75
```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 77 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30
```

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val
65 70 75

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys
65 70 75

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 79 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys

50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly
65 70 75

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 80 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 81 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 82 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val Gln

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 83 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val Gln Arg

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 84 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65                  70                  75                  80

Val Gln Arg Tyr
```

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 85 amino acids
(B) TYPE: amino acid
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                  10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60
```

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val Gln Arg Tyr Pro
85

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 86 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val Gln Arg Tyr Pro Gly
85

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 87 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys

50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val Gln Arg Tyr Pro Gly Asn
85

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 88 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val Gln Arg Tyr Pro Gly Asn Gln
85

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 89 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1 5 10 15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
20 25 30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
35 40 45

```
Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65                  70                  75                  80

Val Gln Arg Tyr Pro Gly Asn Gln Thr
                85
```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 90 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                   10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
        35                  40                  45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
    50                  55                  60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65                  70                  75                  80

Val Gln Arg Tyr Pro Gly Asn Gln Thr Thr
                85                  90
```

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 91 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```
Met Pro Ser Pro Cys Cys Met Phe Phe Val Ser Lys Arg Ile Pro Glu
1               5                   10                  15

Asn Arg Val Val Ser Tyr Gln Leu Ser Ser Arg Ser Thr Cys Leu Lys
            20                  25                  30

Ala Gly Val Ile Phe Thr Thr Lys Lys Gly Gln Gln Phe Cys Gly Asp
```

35 40 45

Pro Lys Gln Glu Trp Val Gln Arg Tyr Met Lys Asn Leu Asp Ala Lys
50 55 60

Gln Lys Lys Ala Ser Pro Arg Ala Arg Ala Val Ala Val Lys Gly Pro
65 70 75 80

Val Gln Arg Tyr Pro Gly Asn Gln Thr Thr Cys
85 90